

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1. (Currently amended): A method of producing a polarizing film, comprising the steps of:

allowing a hydrophilic polymer film to swell wherein the polymer film is conveyed by means of a guide roll so as to be impregnated in an aqueous solvent in a swelling bath, wherein the aqueous solvent is water, and wherein a temperature of the swelling bath is in a range of from 15 to 50°C;

dyeing the polymer film using a dichroic substance; and
stretching the polymer film,

wherein the hydrophilic polymer film is a polyvinyl alcohol-based film containing (i) polyvinyl alcohol having an average degree of polymerization in the range of from 1,000 to 4,000 and a saponification degree in the range of from 98 to 100 mol%, and (ii) glycerine in an amount of from 5 to 15% by mass as an additive,

wherein in the swelling step, at least a first guide roll and a second guide roll are arranged in the swelling bath, and

when the polymer film is impregnated in and allowed to travel in the aqueous solvent, the polymer film is brought into contact with the first guide roll within a time up to when swelling of the polymer film occurs abruptly and further is brought into contact with the second guide roll after the swelling of the polymer film has occurred abruptly,

wherein a required length of time (a) between the time when the polymer film is brought into contact with the aqueous solvent and the time when the polymer film is brought into contact with the first guide roll is 0.6 to 12 seconds,

wherein a required length of time (b) between the time when the polymer film is brought into contact with the first guide roll and the time when the polymer film is brought into contact with the second guide roll is 13 to 120 seconds, and

wherein an arbitrary point on the film is impregnated in the swelling bath for a total length of time of from 63 to 130 seconds, and

wherein a length of time between the time when the polymer film is brought into contact with the aqueous solvent and a time when swelling of the polymer film occurs abruptly is 15 to 25 seconds.

2-7. (Canceled).

8. (Previously presented): The method according to claim 1,
wherein a length of time in which the polymer film is impregnated in the swelling bath is not less than 100 seconds.

9. (Previously presented): The method according to claim 1,
wherein the hydrophilic polymer film before being subjected to a swelling treatment has a thickness in a range of not more than 110 μm .

10-11. (Canceled)

12. (Previously presented): The method according to claim 1,
wherein at least one of the first and second guide rolls is selected from a crown roll, a
bent roll, and a roll with lugs.

13. (Previously presented): The method according to claim 1,

wherein a guide roll other than the first guide roll comprises a spiral roll.

14. (Canceled)

15. (Previously presented): The method according to claim 1,
wherein in the swelling step, the polymer film is subjected to a further stretching
treatment in the swelling bath.

16. (Previously presented): The method according to claim 1,

wherein with respect to a length of the polymer film before being subjected to the
swelling step, a stretch ratio of the polymer film in the stretching treatment is in a range of 1.5 to
4.0 times.

17. (Previously presented): The method according to claim 1,
wherein the dichroic substance is at least one of iodine and organic dyestuffs.

18. (Original): The method according to claim 17,
wherein the dichroic substance comprises at least two of the organic dyestuffs.

19-30. (Canceled)

31. (Previously presented): The method according to claim 1,
wherein aqueous solvent in the swelling bath is water,
wherein the dyeing step is conducted in a dyeing bath containing dichroic substance and
potassium iodide, and
wherein the stretching step is conducted in a stretching bath containing boric acid.

32. (Previously presented): The method according to claim 1,
wherein
a temperature of the swelling bath is in a range of from 15 to 50°C, and
a stretch ratio of the polymer film in the swelling bath is from 1.5 to 4.0 times.

33. (Previously presented): The method according to claim 32,
wherein

the required length of time (a) is from 1.2 to 9 seconds, and
the required length of time (b) is from 20 to 120 seconds.

34. (Previously presented): The method according to claim 33,
wherein

the required length of time (a) is from 2.5 to 7 seconds, and
the required length of time (b) is from 33 to 120 seconds.

35. (Previously presented): The method according to claim 1,
wherein

the required length of time (a) is from 1.2 to 9 seconds, and
the required length of time (b) is from 20 to 100 seconds.

36. (Previously presented): The method according to claim 35,
wherein

the required length of time (a) is from 2 to 11 seconds, and
the required length of time (b) is from 35 to 110 seconds.

37. (New): The method according to claim 1, wherein the swelling bath is water.